



# ecology and environment, inc.

160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811

International Specialists in the Environment

## MEMORANDUM

TO: Paul La Courreye, EPA  
FROM: Patty Cook, E & E, Inc.  
DATE: September 12, 1988  
SUBJECT: Completed Work  
cc: Marcia Brooks, E & E, Inc.

PAI complete  
10/1/88  
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This list is for the attached completed:

- ☐ PA(s)  
☒ PA Review(s)  
☐ PA Reassessment(s)  
☐ SI(s)  
☐ Other \_\_\_\_\_

<u>Site Name</u>	<u>EPA I.D.#</u>	<u>City</u>	<u>State Recom- mendation</u>	<u>FIT Recom- mendation</u>	<u>State Lead</u>
Canyon Industries, Inc.	AZD089995856	Phoenix	NFRAP	NFRAP	

4 EVT → A, PAI, N, F, 10/01/88  
SI1 → V, N

s/sw/par/can



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### MEMORANDUM

**TO:** Paul La Courreye, U.S. Environmental Protection Agency (EPA)

**FROM:** Su-san Wen, Ecology and Environment, Inc. *sur*

**THROUGH:** Chris Lichens, Ecology and Environment, Inc. *CK*

**DATE:** September 12, 1988

**SUBJECT:** Review of the Preliminary Assessment (PA) of Canyon Industries, Inc., prepared by Gloria Gowan of the Arizona Department of Environmental Quality (ADEQ), dated February 1988, revised by Richard Robbins of (ADEQ), dated July 1988.

**EPA ID#:** AZD089995856

**cc:** FIT Master File  
Dan Marsin, Arizona Department of Environmental Quality,  
Phoenix

#### Summary:

Canyon Industries, Inc. (Canyon), located in a residential area at 734 East Southern Pacific Drive in Phoenix, Arizona, is a part of a 2.5 acre industrial complex (land owned by Southern Pacific Railroad). The Canyon facility, owned and operated by Canyon Industries, Inc., has been in existence since 1978. Canyon is a batch chemical plant which produces de-icing fluids (for aircrafts), disinfectants, and cleaning products.

The constituents of the de-icing fluid are ethylene glycol, alcohol, and water, while quaternary ammonium complexes are the primary constituents of the disinfectant. Unspecified caustics and acids are the constituents for the cleaning products. The PA did not give further details for the caustics and acids. Batch tanks are used to mix the various chemical constituents of the products. The products are then packaged for sale. Prior to July 1986, the emptied batch tanks were rinsed with 15 to 20 gallons of water. The first 5 gallons of the rinsate were drained to a septic tank, while the remaining rinsate was discharged directly to the ground. From 1978 to 1986, 17000 pounds of rinsate were produced annually (total of 68 tons from 1978-1986). Since 1986, Canyon ceased discharging the rinsate to the ground and septic tank, and contained all its wastewaters. The PA did not indicate what type of containment is currently used on-site, or how the wastewaters are currently disposed.

On July 29, 1983, Arizona's Bureau of Waste Control (BWC) sampled an irrigation well located at Eastlake Park, 16th and Jefferson in Phoenix (approximately 0.75 miles east of the Canyon site). The Arizona Department of Health Services (ADHS) detected TCE at a level of 61.1 parts per billion from the well sample taken by BWC. There is no indication that TCE is used

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on the Canyon site.

Following the discovery of the TCE contamination, the 24 square mile area bordered by Thomas Road, 48th Street, University Drive, Lower Buckeye Road, and 7th Avenue was established as the Phoenix Eastlake Park Groundwater Contamination Study Area. Since Canyon is located within this area, it was included as a potentially responsible party for the TCE contamination by ADHS. The PA did not explain how the boundaries for the study area were determined.

#### RCRA Status:

The RCRA status for Canyon was not given in the PA. It is currently listed as a generator in the EPA RCRA database.

#### HRS Factors:

The PA incorrectly claimed an observed release to groundwater for the Canyon site. There were no background samples taken and the detected TCE in the well was not demonstrated to have come from the Canyon site.

The revised PA, by Robbins, addressed the groundwater route in more detail than the original PA. According to the PA, there are no active City of Phoenix municipal water supply wells within a 3-mile radius of the site. However, there are two Salt River Project irrigation wells within this area. The distance to the nearest well was not mentioned in the PA. FIT determined that the nearest irrigation well is approximately 1.75 miles away from the site. The number of acres irrigated by these wells is not known.

The revised PA adequately addressed the surface water route. The PA indicated that the potential for surface runoff to reach the Salt River is low, since the river is 1.5 miles away, and the facility slope and intervening terrain is between 0 and 1 percent. The Salt River is an intermittent river that flows only after water is released from upstream dams. The water flows into the Gila River which is used for recreation. The target population is "small", according to the PA. The PA did not give the location of the Gila River.

There was a past potential for release of contaminants to the air, since rinsate was dumped directly to the ground. However, a future release to air appears unlikely, since the rinsate is now contained.

#### Recommendations/Justifications:

##### 1. EPA

The State recommended no further action at the Canyon site. FIT concurs with the State's recommendation based on the following factors:

- o quantity of hazardous waste is relatively low (68 tons of rinsate);
- o groundwater in the area (3-mile radius) is not used for drinking;

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- o potential for surface runoff to reach closest surface water (Salt River 1.75 miles away) is low;
- o toxicity/persistence rating for ethylene glycol and ammonium are fairly low; and
- o potential for air release appears unlikely, since rinsate is currently contained.

## 2. State

A copy of this PA review will be forwarded to the State for its consideration.

### EPA Concurrence:

### Initial

### Date

No Further Action

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Medium-Priority SSI

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High-Priority SSI

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